

REMARKS

The specification has been amended to correct minor grammatical errors. The abstract has been amended to better conform to U.S. practice. The claims have been amended to eliminate "means" language and application of 35 USC §112, ¶6.

Claim 1 has been amended to incorporate the features of claim 2, and claim 2 has been canceled, without prejudice. New claims 10-12 have been added to further scope the invention.

Turning to the rejection of claims 1 and 5-8 as obvious over Graham (EP 0849873 A1) in view of Staudinger et al. (U.S. Patent 5,339,462), and claims 2-4 as obvious over Graham in view of Staudinger et al. further in view of Laws (U.S. Patent 5,303,417), claim 1 has been amended to include the features of claim 2. There is a distinct difference between the features of amended claim 1 and new claim 12, and Graham, Staudinger, and Laws. Claims 1 and 12 require that the phase shifters in the image rejection mixer comprise lattice circuits having inductors and resistors (LR lattice circuits). This feature of Applicant's claims 1 and 12 enables the DC component of the current signals inputted to the phase shifter to flow through the inductors, and then eliminates the voltage drop across the resistors, thereby reducing the power consumption of the image rejection mixer (page 11, lines 11-21).

The combination of Graham, Staudinger et al. and Laws does not teach the above-mentioned feature of amended claim 1 and new claim 12.

Neither Graham, Staudinger et al. nor Laws teaches the prevention of the voltage drop of the phase shifter of current phase shift type, thereby reducing the power consumption of the image rejection mixer. Also, there is no motivation for one skilled in the art to use a lattice circuit having inductors and resistors in the image rejection mixer. Thus, no combination of

Graham, Staudinger et al. and Laws can achieve or render obvious Applicant's independent claims 1 and 12, nor any claims dependent therefrom.

Turning to the rejection of claim 9 as obvious over Graham in view of Staudinger et al., the Examiner's rejection is in error. Amended claim 9 requires a "signal distributor supplied with local signals having a phase difference." No combination of Graham and Staudinger et al. teaches this feature. Graham teaches a signal supplied from a local oscillator that is shifted by plus or minus 45° by phase shifters 3 and 4, respectively (FIG. 1; col. 2, lines 35-40). Nowhere does Graham teach a signal distributor that receives two local signals with different phases. Thus, Graham cannot render obvious this aspect of claim 1. Furthermore, Staudinger et al. does not supply the missing teaching. Staudinger et al. teaches a signal supply from a local oscillator that is fed into a four-port phase shift network (FIG. 3). Nowhere does Staudinger et al. teach a signal distributor supplied with local signals having a phase difference. Thus, no combination of Graham and Staudinger et al. can be said to achieve or render obvious claim 9.

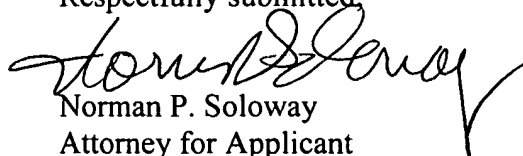
Having dealt with all the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action are respectfully requested.

A credit card authorization Form PTO-2038 in the amount of \$282.00 is enclosed to cover the Petition for One-Month Extension of Time (\$110.) and two added independent claims (\$172.). In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account Number 08-1391.

HAYES SOLOWAY P.C.
130 W. CUSHING STREET
TUCSON, AZ 85701
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

Respectfully submitted,


Norman P. Soloway
Attorney for Applicant
Reg. No. 24,315